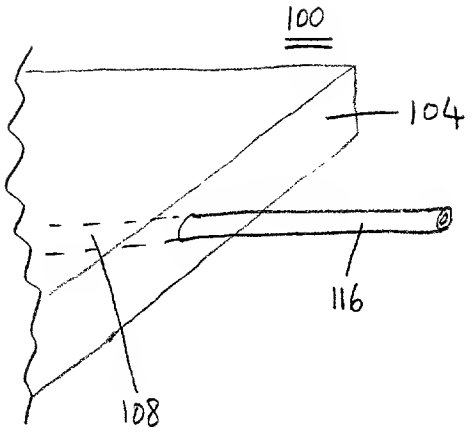



Fig 1A

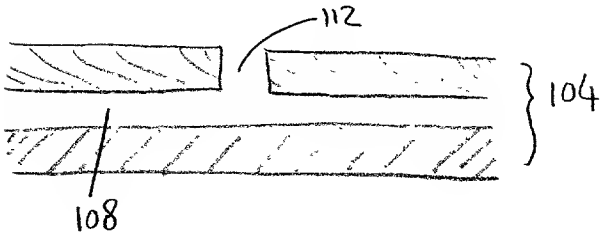



Fig 1B

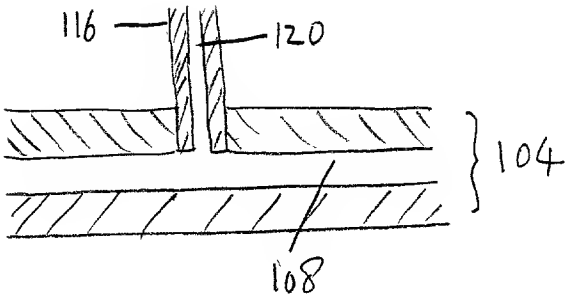



Fig 1C

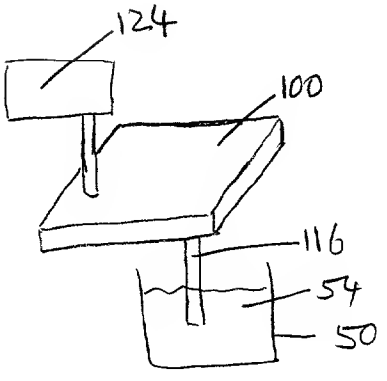



Fig 2A

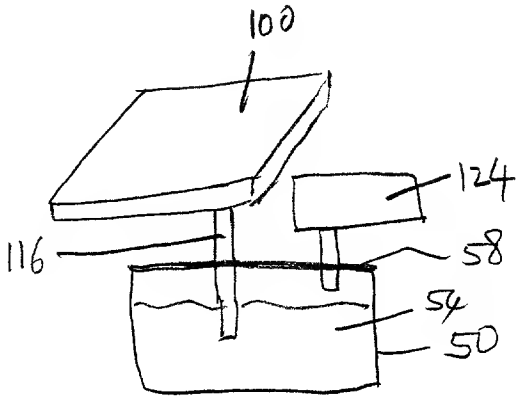



Fig 2B

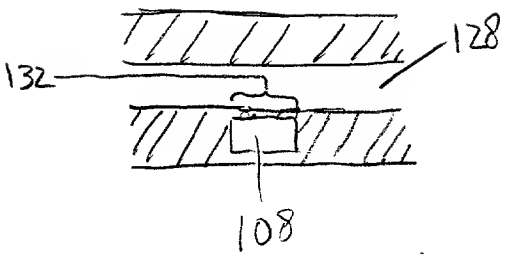



Fig 3A

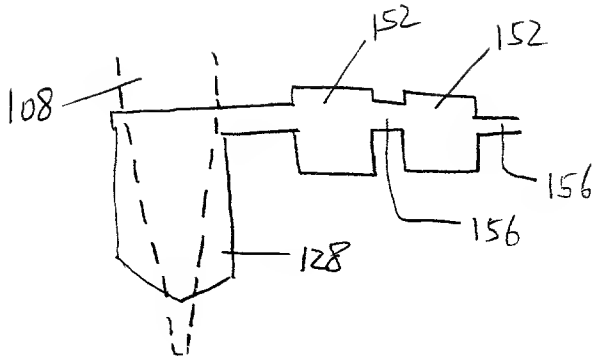



Fig 3B

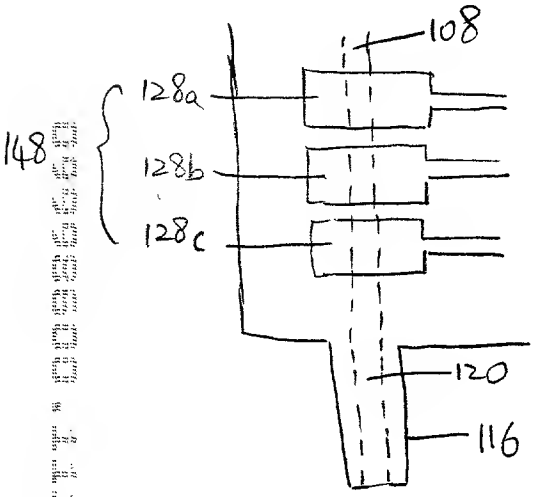



Fig 3C

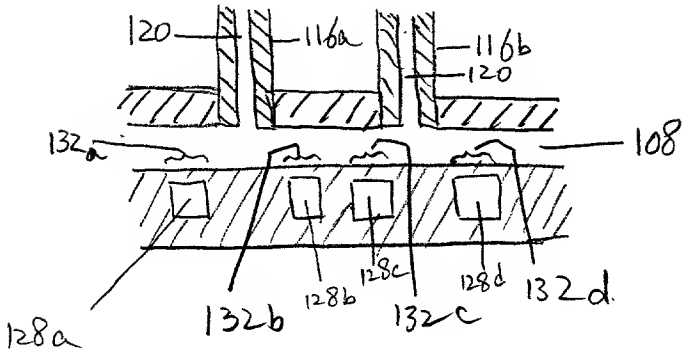



Fig 3D

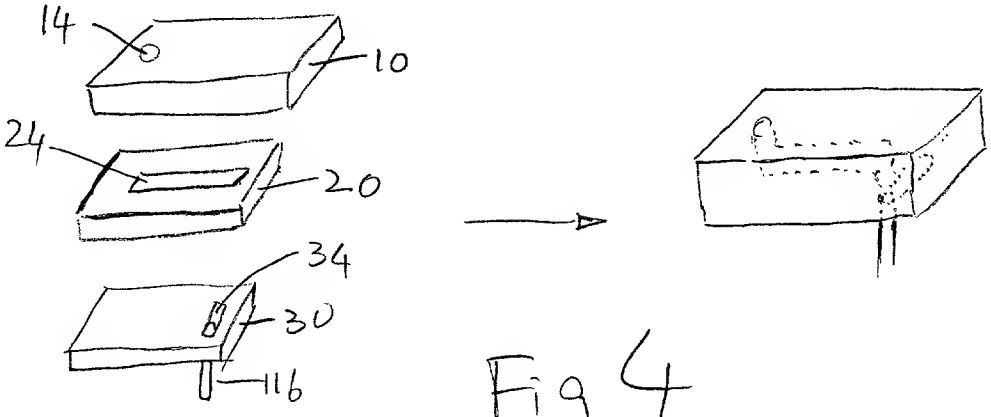



Fig 4

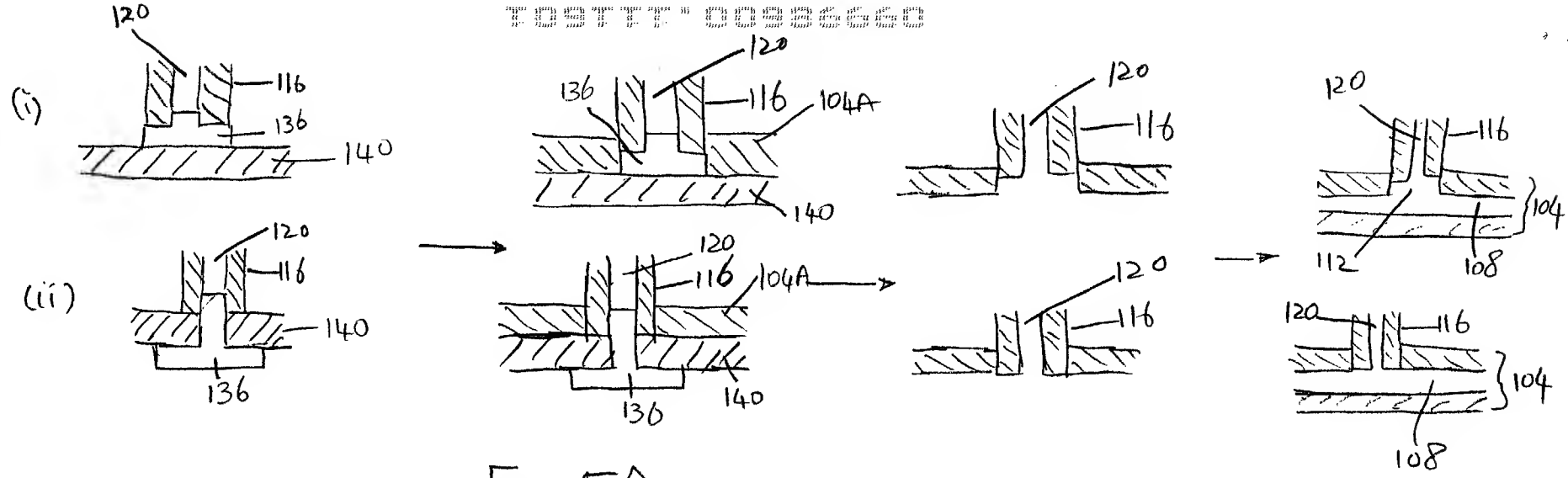

(i)
(ii)
120
116
136
140
104A
104
112
108

Fig 5A

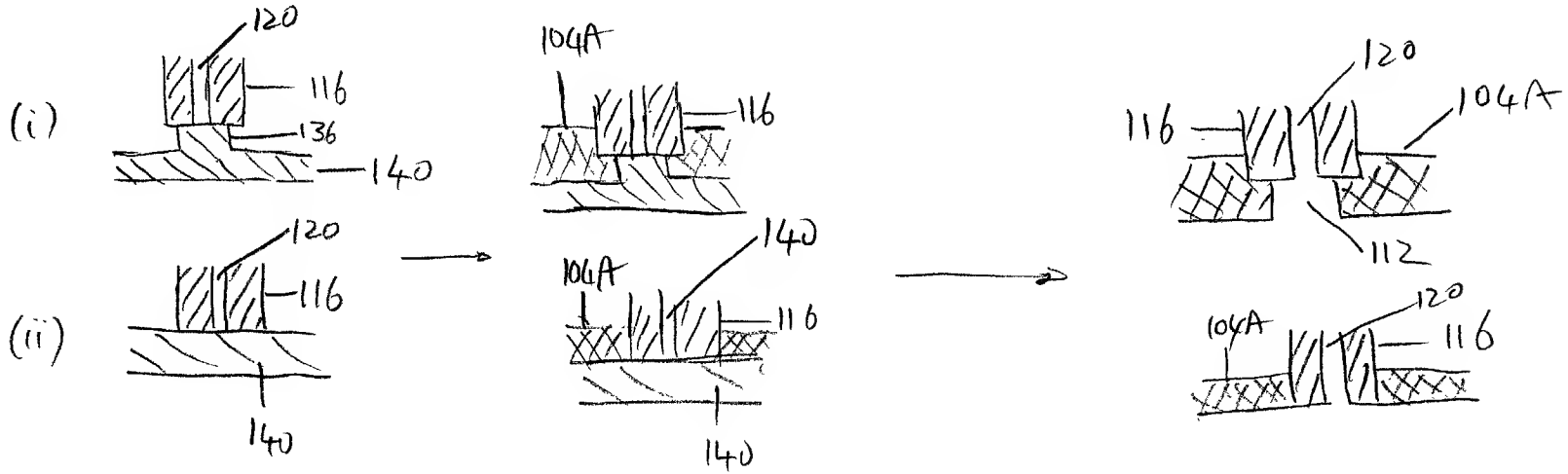

(i)
(ii)
120
116
136
140
104A
112

Fig 5B

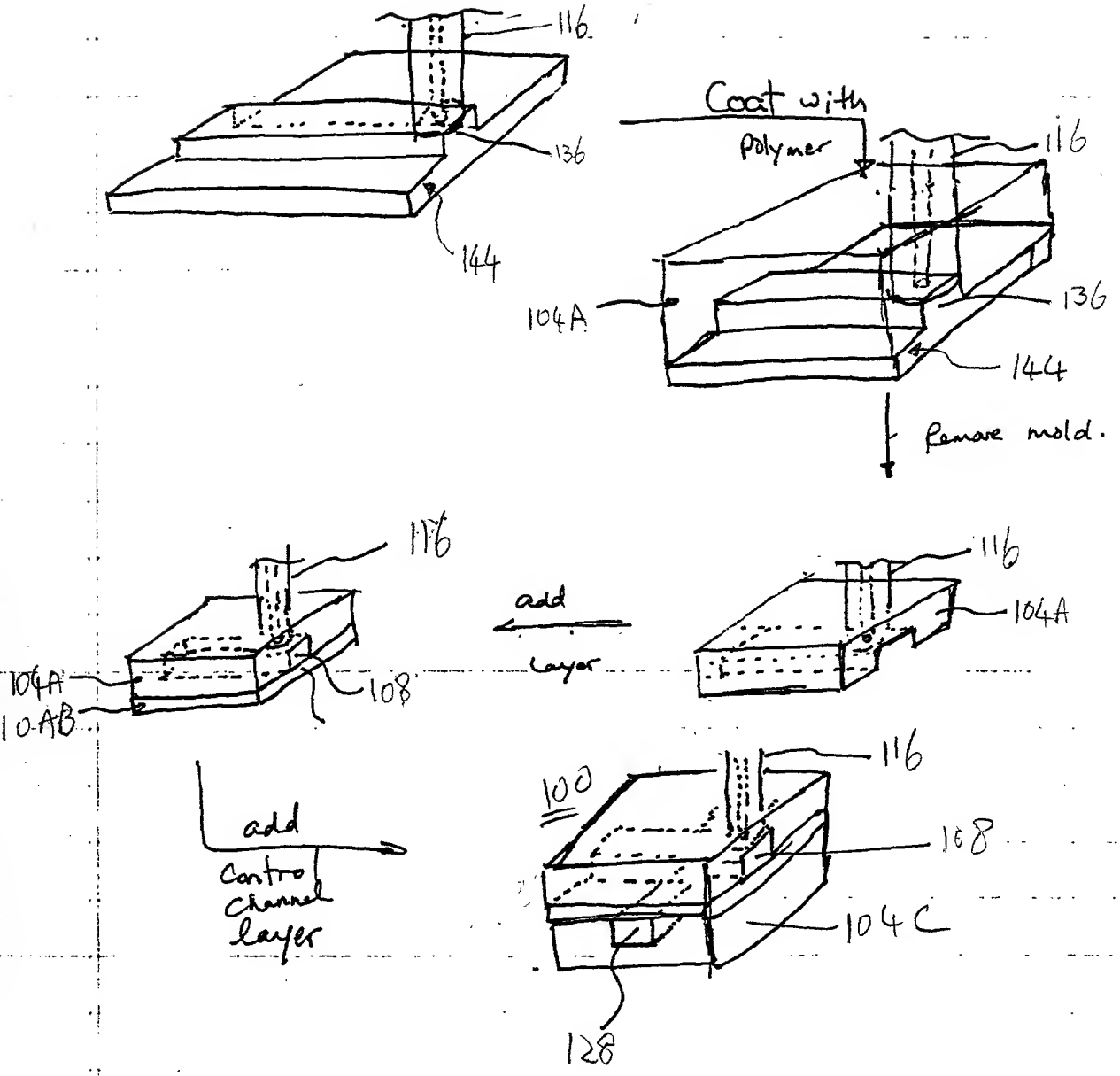

116
136
144
Coat with
Polymer
116
104A
136
144
Remove mold.
116
104A
10AB
108
add
layer
116
104A
add
Contro
channel
layer
116
100
108
104C
128

Figure 5C

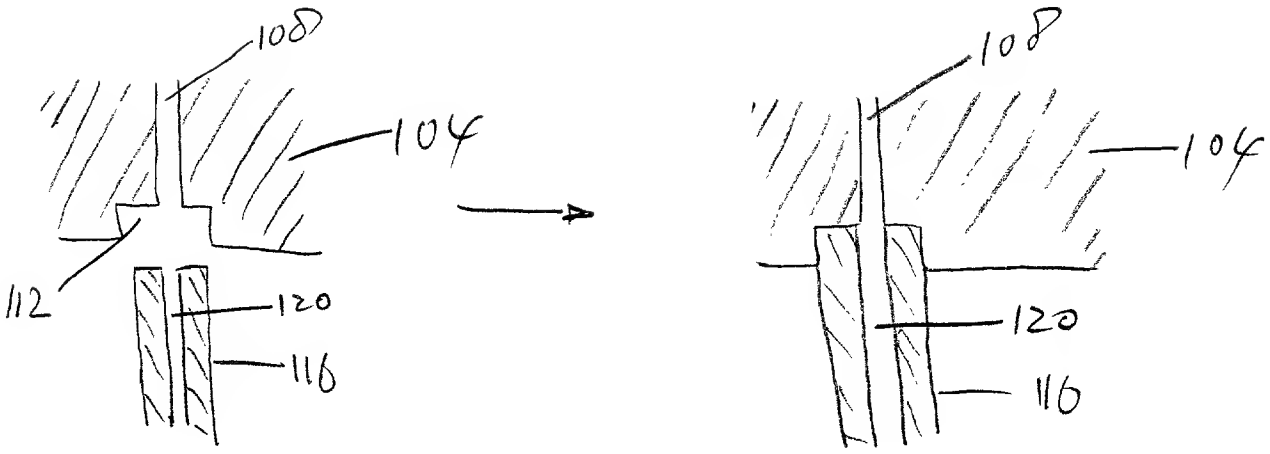
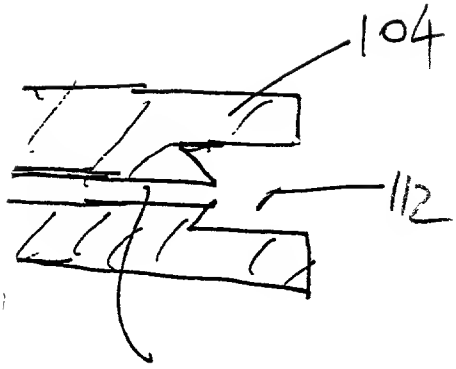



Fig 6A



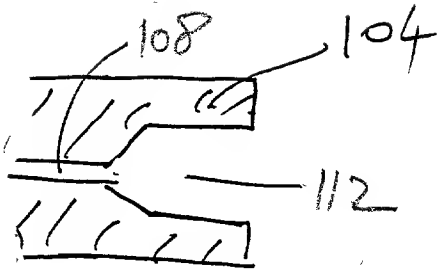
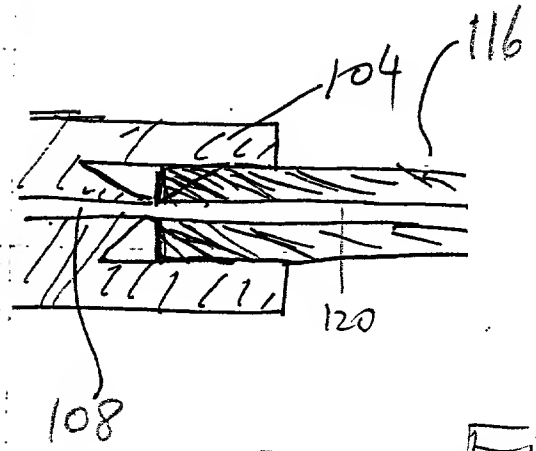




Fig 6B



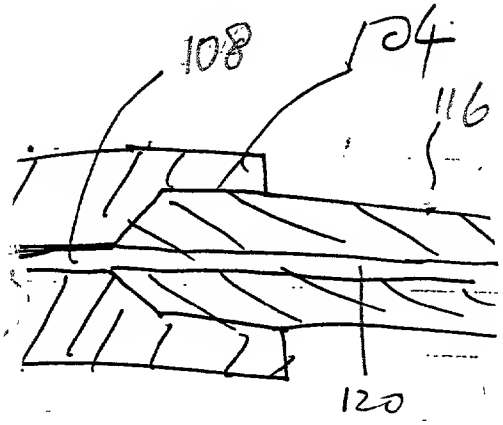




Fig 6C

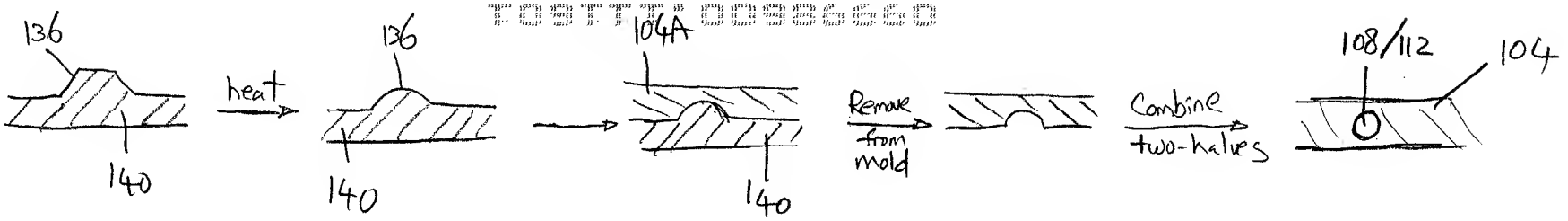



Fig 7

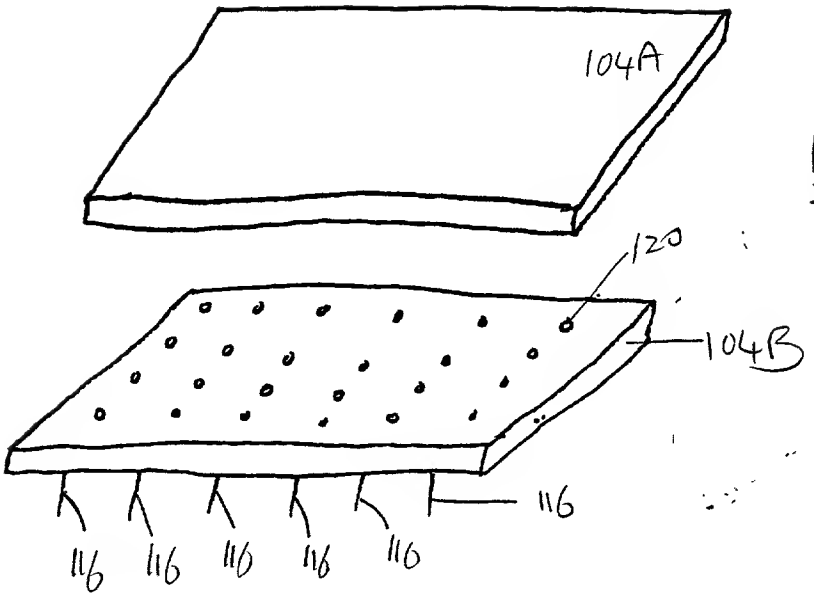



Fig 8A

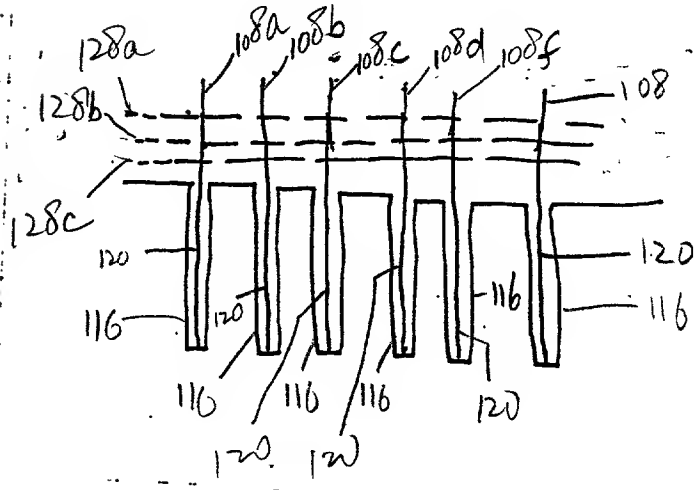



Fig 8B

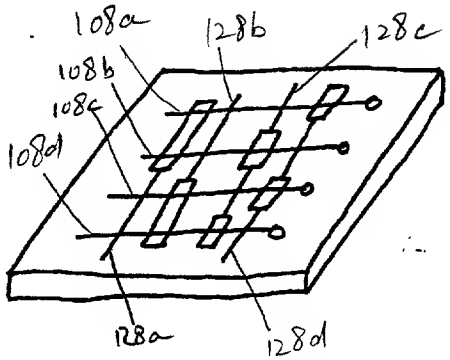



Fig 9

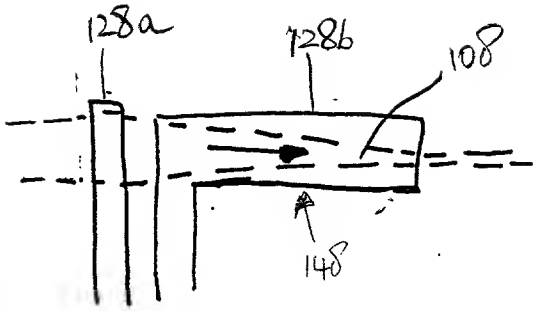



Fig 10A

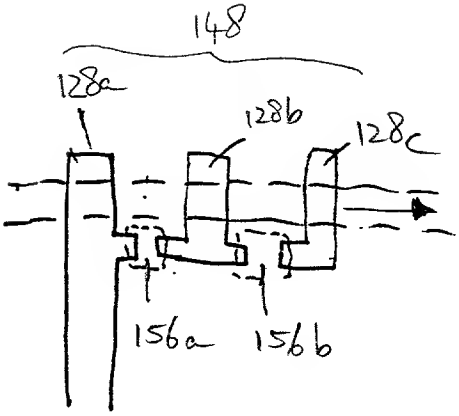



Fig 10E

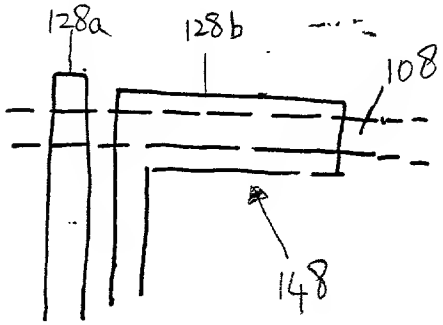



Fig 10B

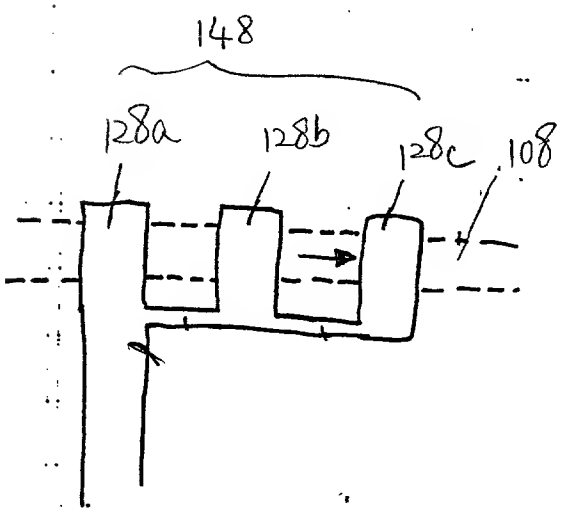



Fig 10C

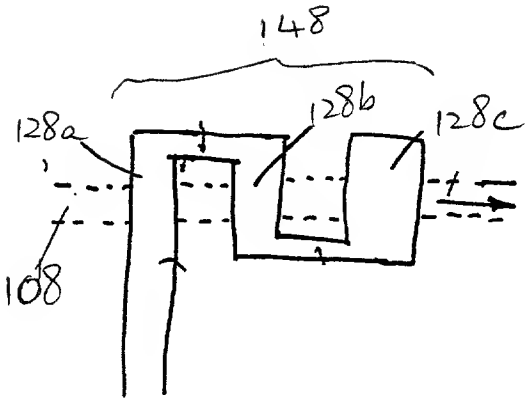



Fig 10D

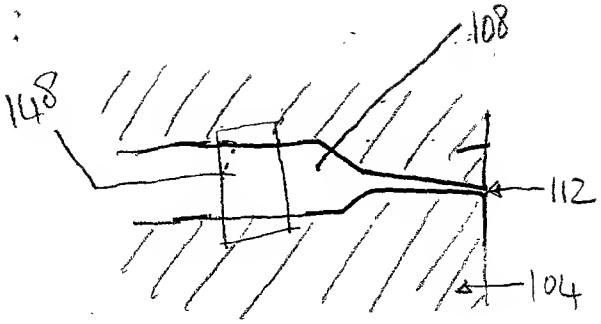



Fig 11B

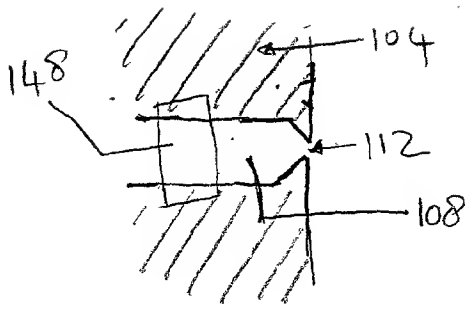



Fig 11C

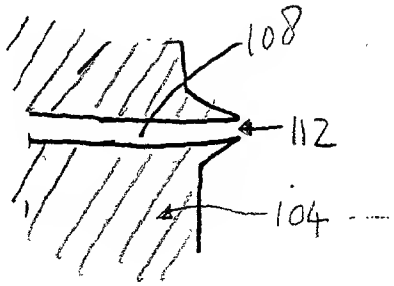



Fig 11A

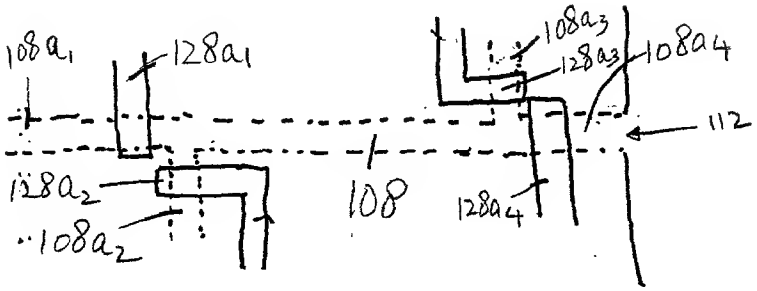



Fig 12A

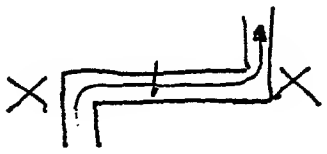


Fig 12B

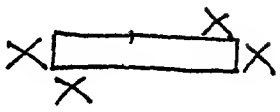


Fig 12C

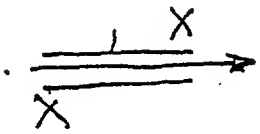
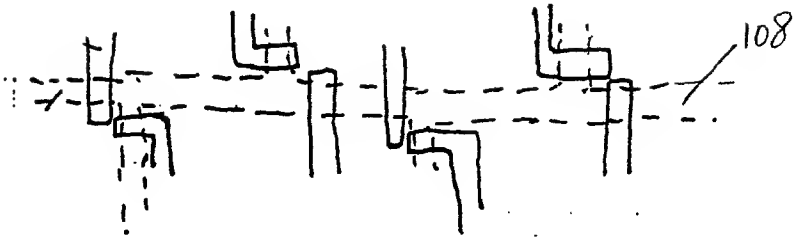


Fig 12D




12E

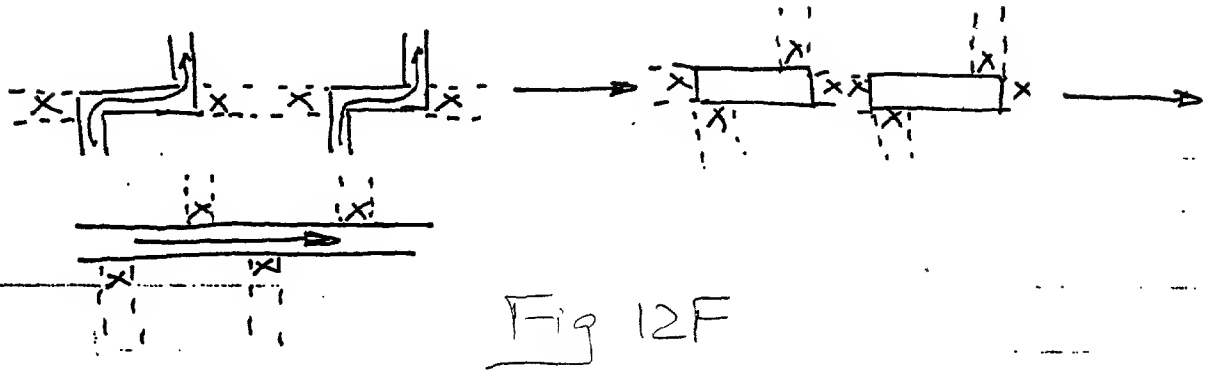


Fig 12F

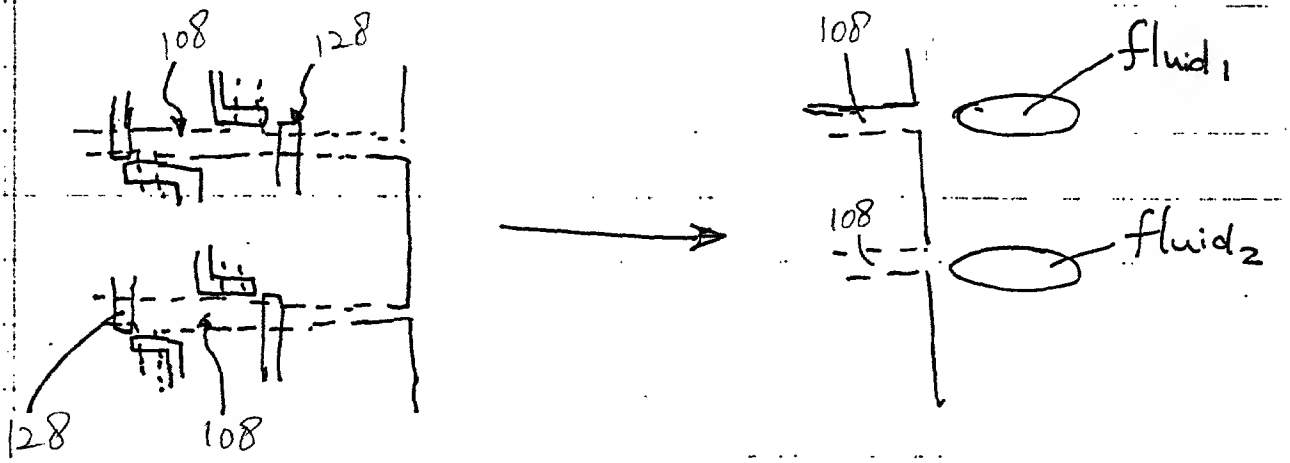



Fig 12G

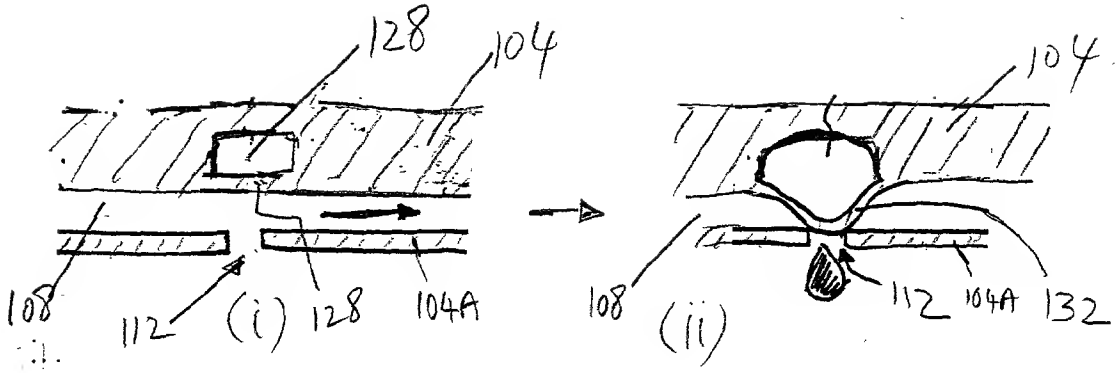



Fig 13A

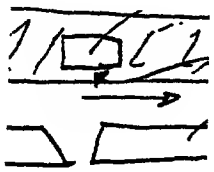


Fig 13B

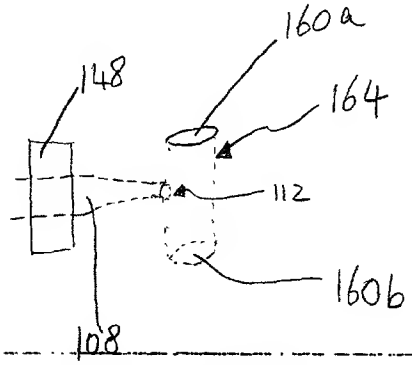



Fig 15A

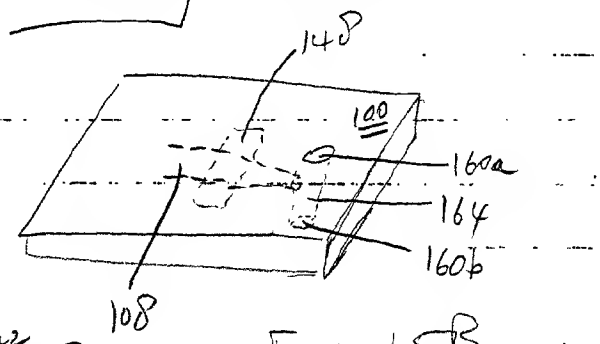



Fig 15B

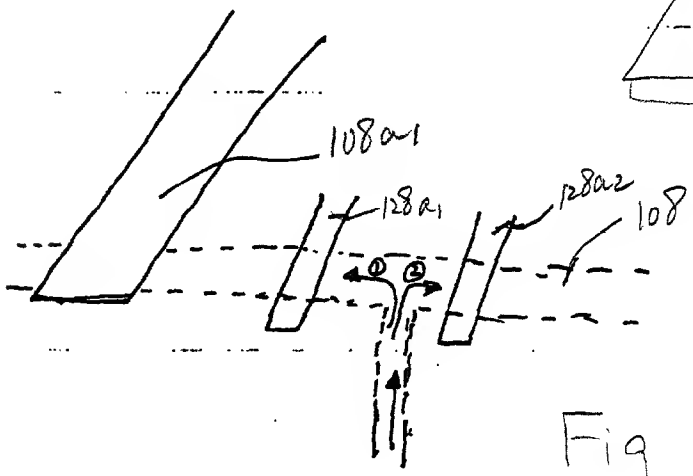



Fig 14A

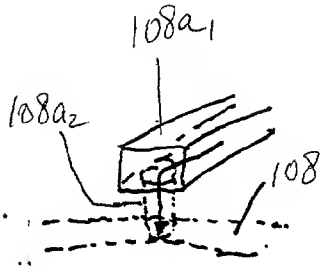



Fig 14B

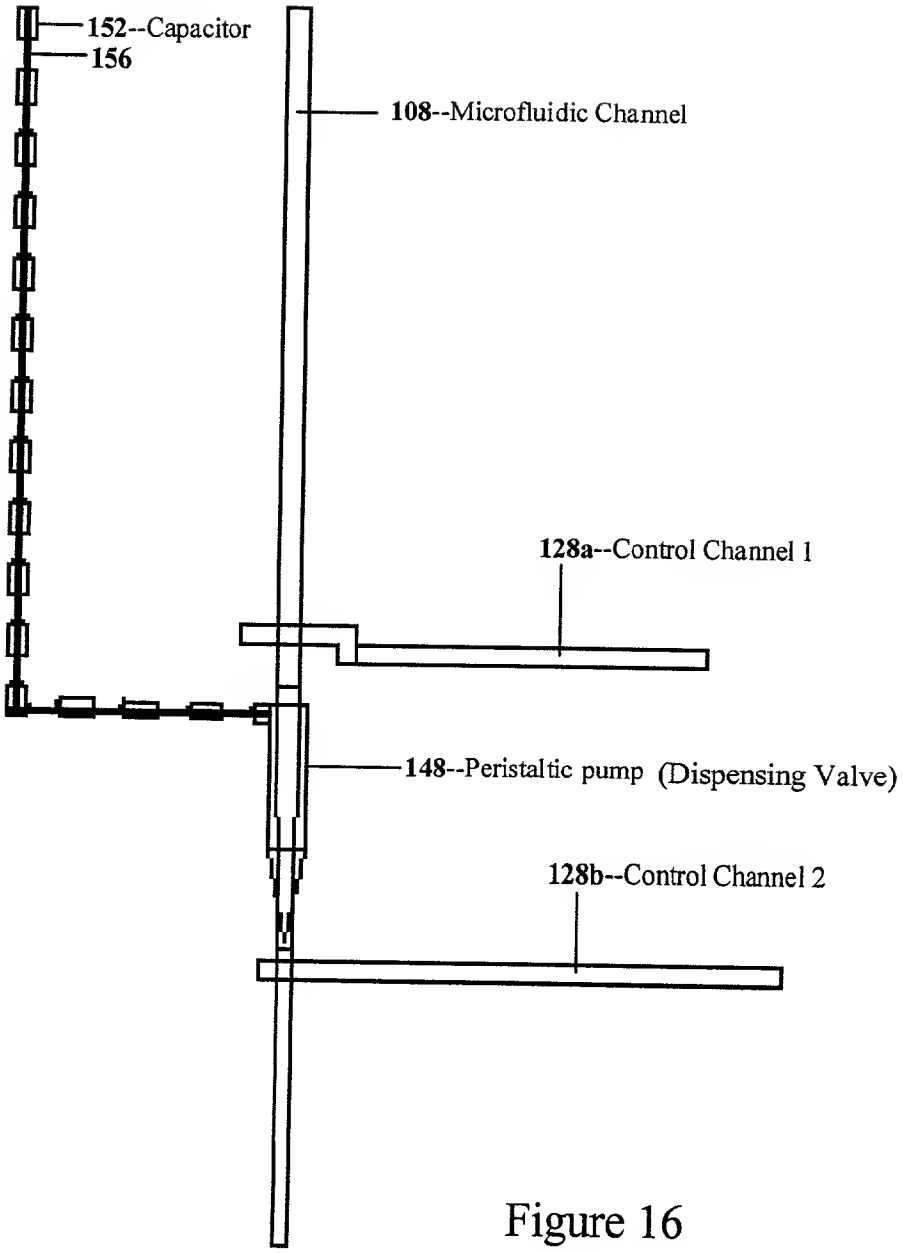

152--Capacitor
156
108--Microfluidic Channel
128a--Control Channel 1
148--Peristaltic pump (Dispensing Valve)
128b--Control Channel 2

Figure 16

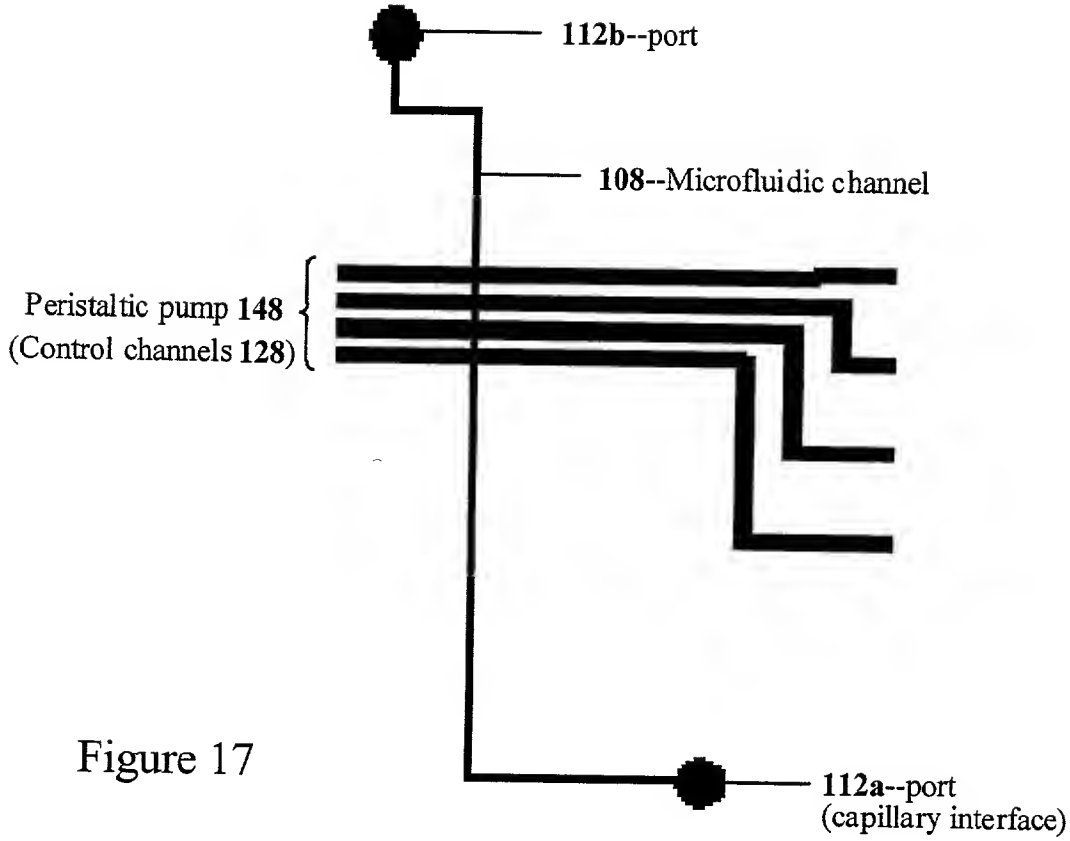



Figure 17

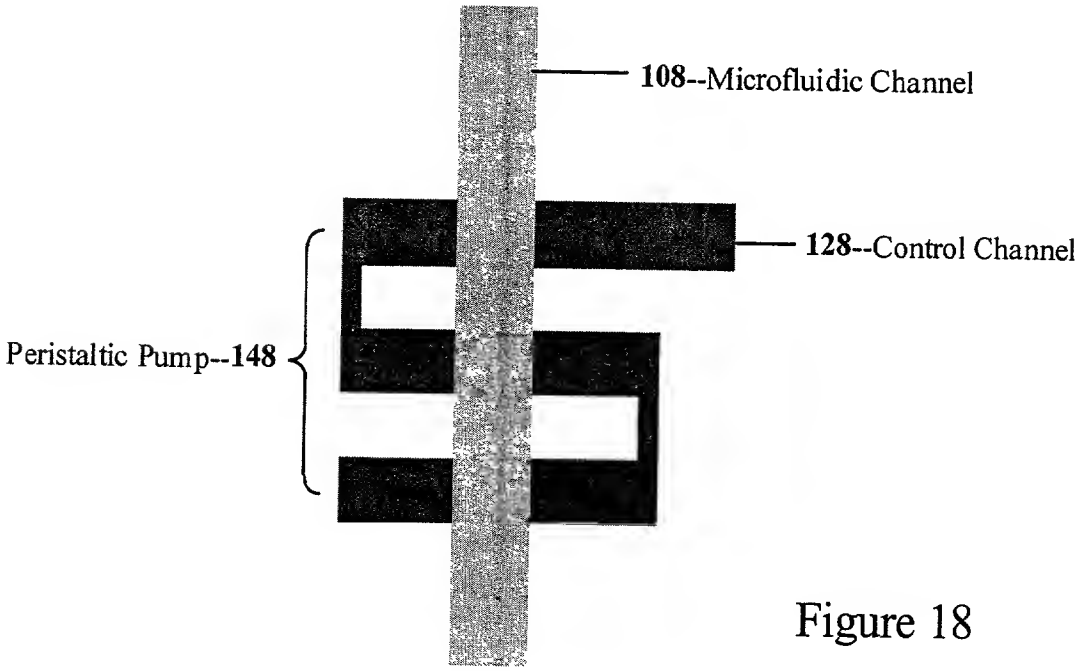



Figure 18

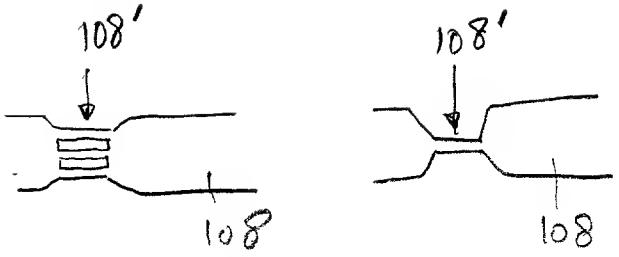



Fig 19

FIG. 20A

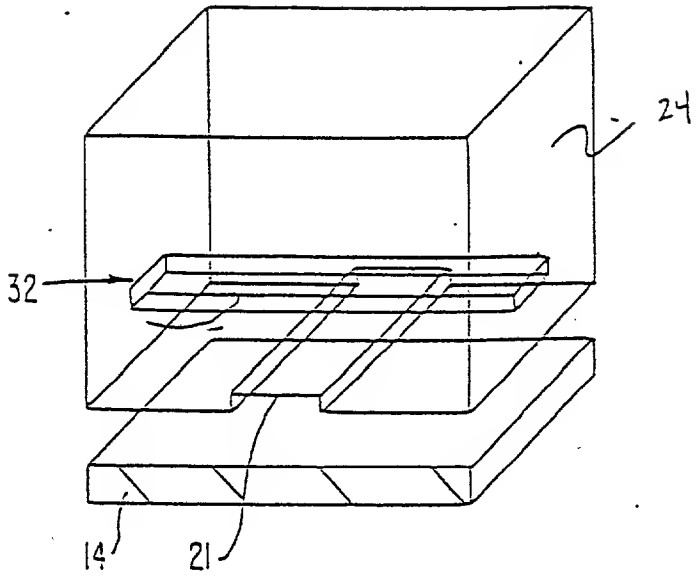
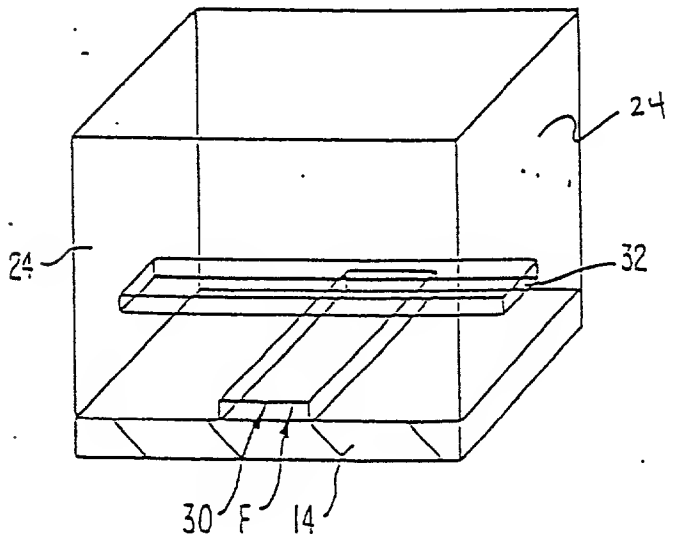



FIG. 20B



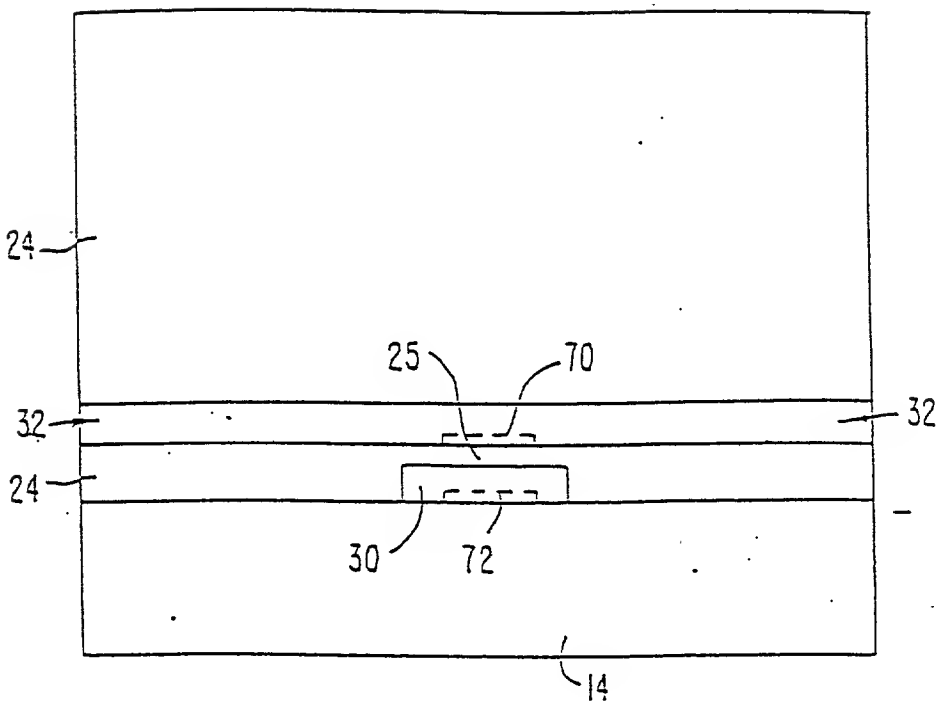



FIG. 2A

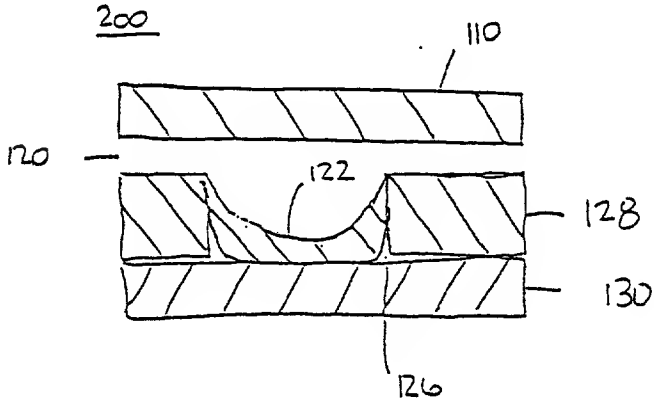



FIG. 2B

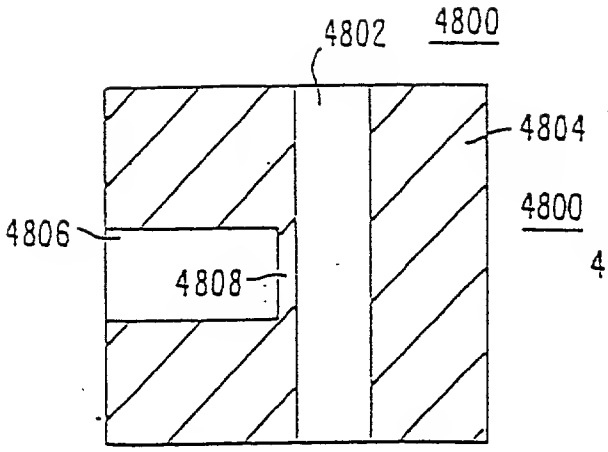



Fig 22A

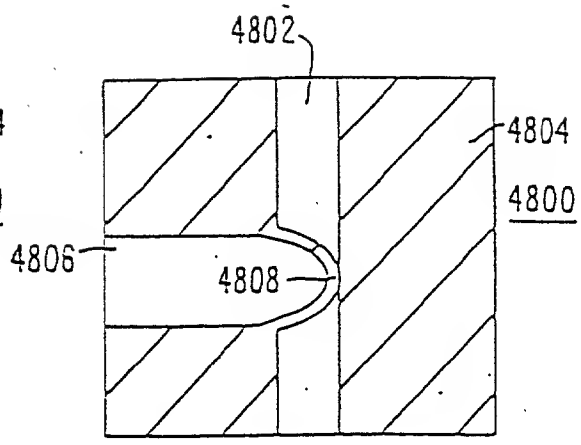



Fig 22B

Fig 23A

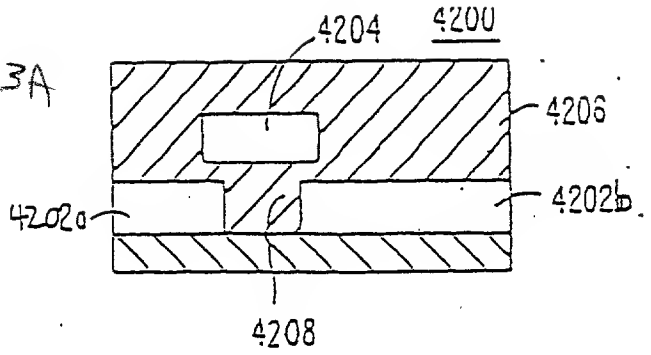
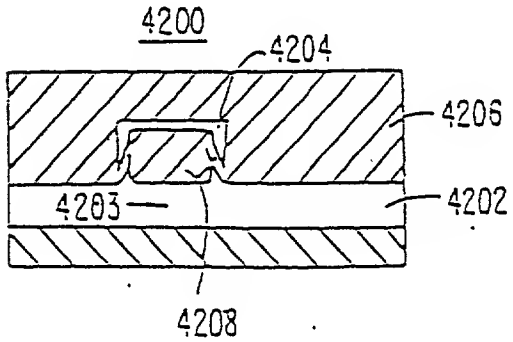



Fig 23B



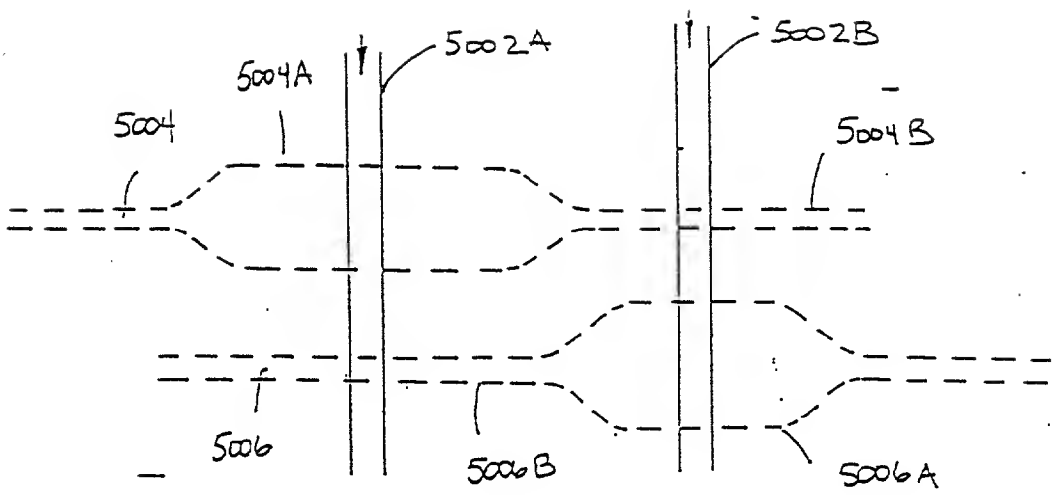



Fig 24

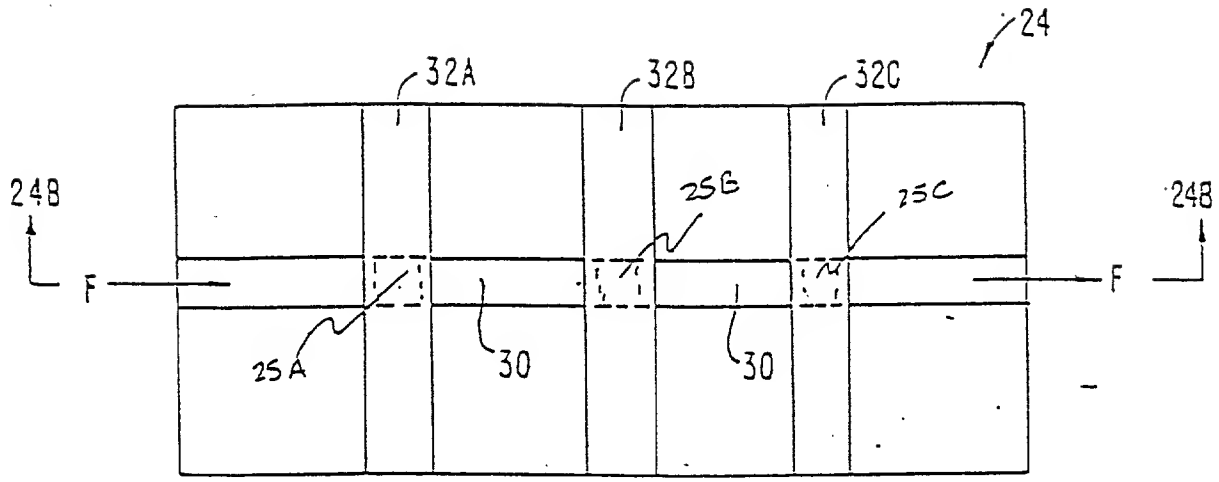



Fig 25A

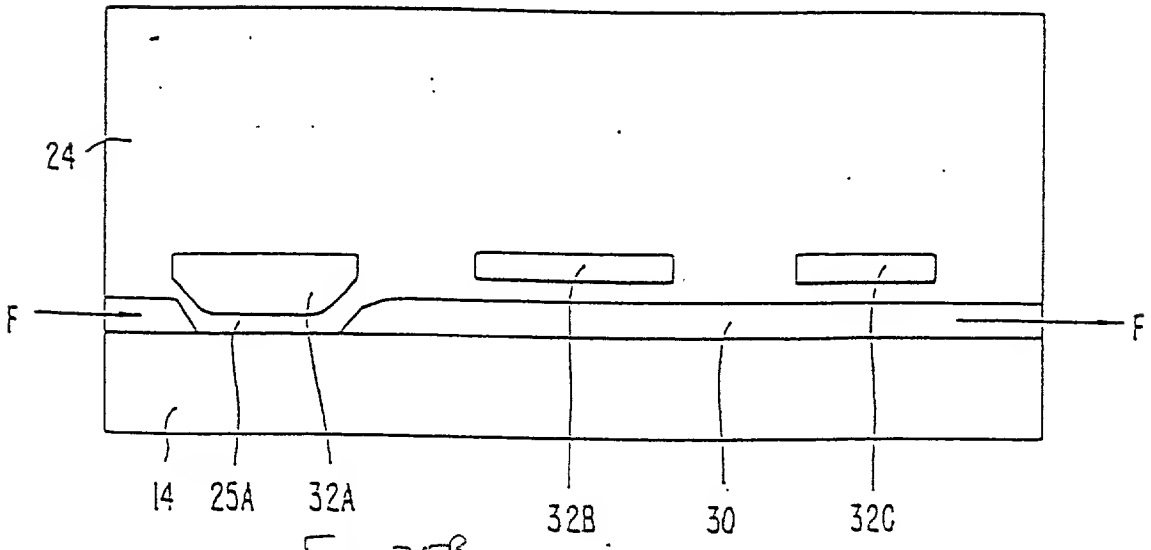



Fig 25B

Fig 26A

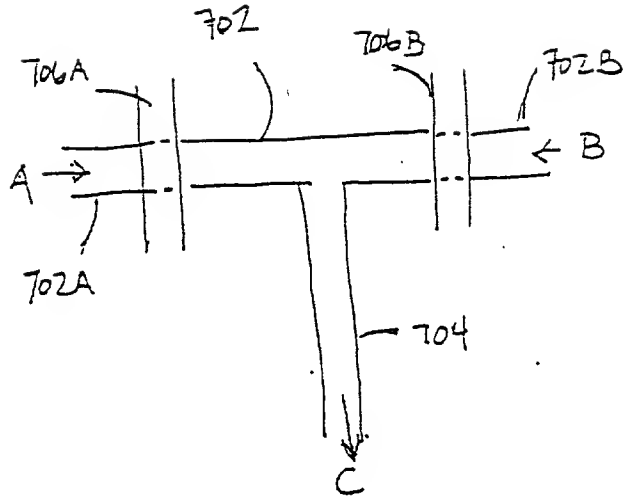



Fig 26B

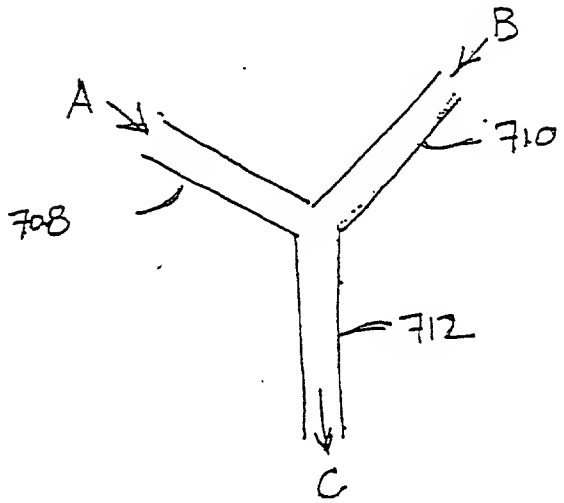



Fig 26C